

<b>NWS FORM E-5</b> <small>(11-88)</small> <small>(PRES. by NWS Instruction 10-924)</small>	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	<b>HYDROLOGIC SERVICE AREA (HSA)</b> <b>WFO Jackson, Mississippi</b>
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH      YEAR <b>September      2013</b>
TO:      Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE <b>Alan E. Gerard, Meteorologist In-Charge</b> <hr/> DATE <b>10/10/2013</b>

*When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)*

☒ **An X inside this box indicates that no river flooding occurred within this hydrologic service area.**

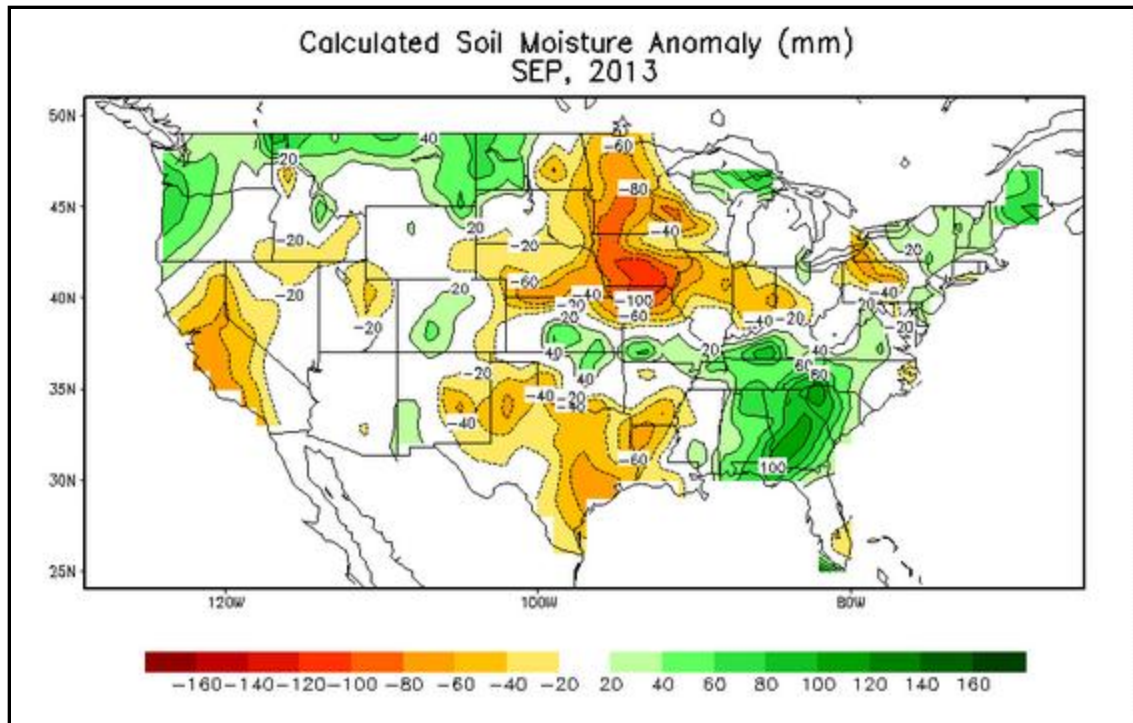
**Synopsis...**

September was a relatively wet month across the Hydrologic Service Area, HSA, though this was not without some long, dry periods in the first half of the month. Most locations still ended the month with above normal rainfall. Meridian was the only ASOS station which ended with below normal. Greenwood received the most, totaling over 8 inches, and Greenville, which collected more than 7 inches and is still 1 inch below the yearly normal rainfall. In reference to temperatures, the average monthly temperature at all ASOS sites was above normal. Meridian was the coolest location which rose to only 1.2 degrees above the average temperature and Jackson was the warmest with 3.2 degrees above normal.

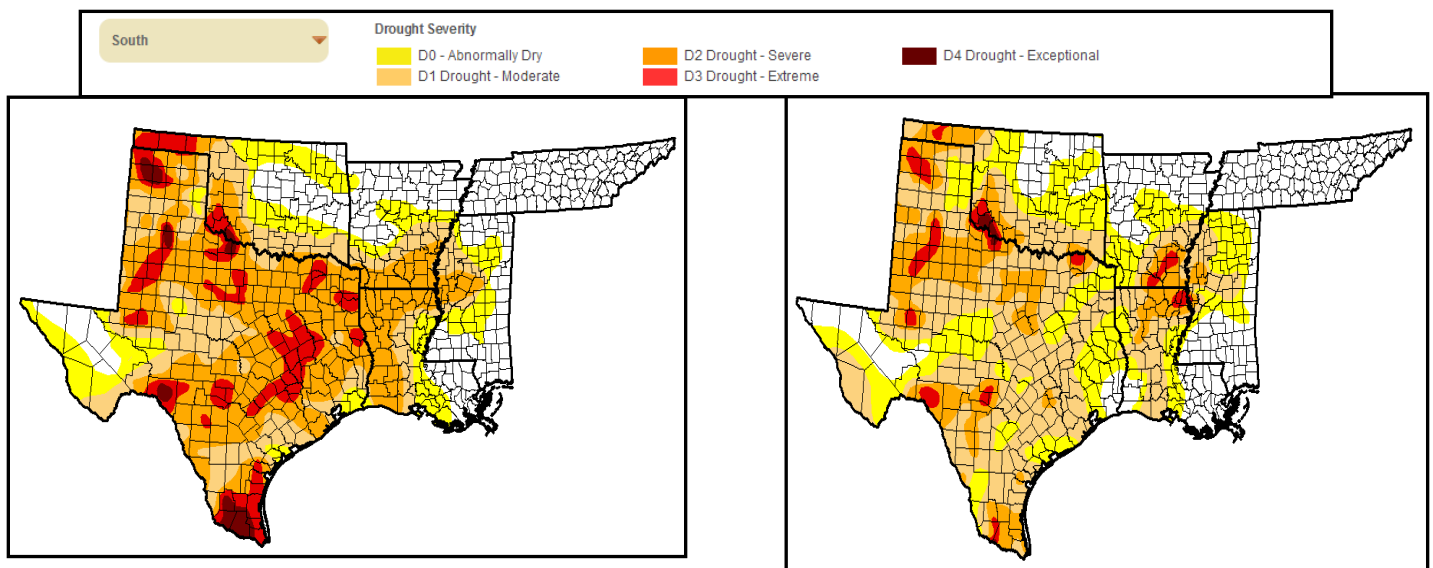
The month started out with high pressure located over the Deep South. Come September 3<sup>rd</sup> though, a cold front approached the area and brought scattered showers and thunderstorms again to the HSA. The frontal boundary continued its slow journey through the area. While dry air resided behind the boundary, most of the rain that fell on the 4th fell south of I-20. High pressure shifted into the South after the front moved towards to the coast the next day. High pressure became the principal weather feature of the next week. On the 13<sup>th</sup>, another cold front traveled through the area, though it was a weak one by the time it reached the HSA. While this boundary did not bring much rain with it, it did bring cooler temps just in time for the autumn equinox. High pressure quickly built in behind this front and dominated the eastern U.S. through the 20<sup>th</sup> when a strong upper low formed in Canada. This low pressure brought a strong frontal boundary through a large portion of the Midwest and South as well as across our HSA on the 21<sup>st</sup>. Many locations received more than 3-4 inches of rainfall, setting daily rainfall records at more than one observation site. A shortwave trough on the 25<sup>th</sup> and one final cold front to cut across the area on the 30<sup>th</sup> brought the last rainfall amounts for the month of September.

## River and Soil Conditions...

### Soil Moisture Map:



### Drought Monitor Comparison:

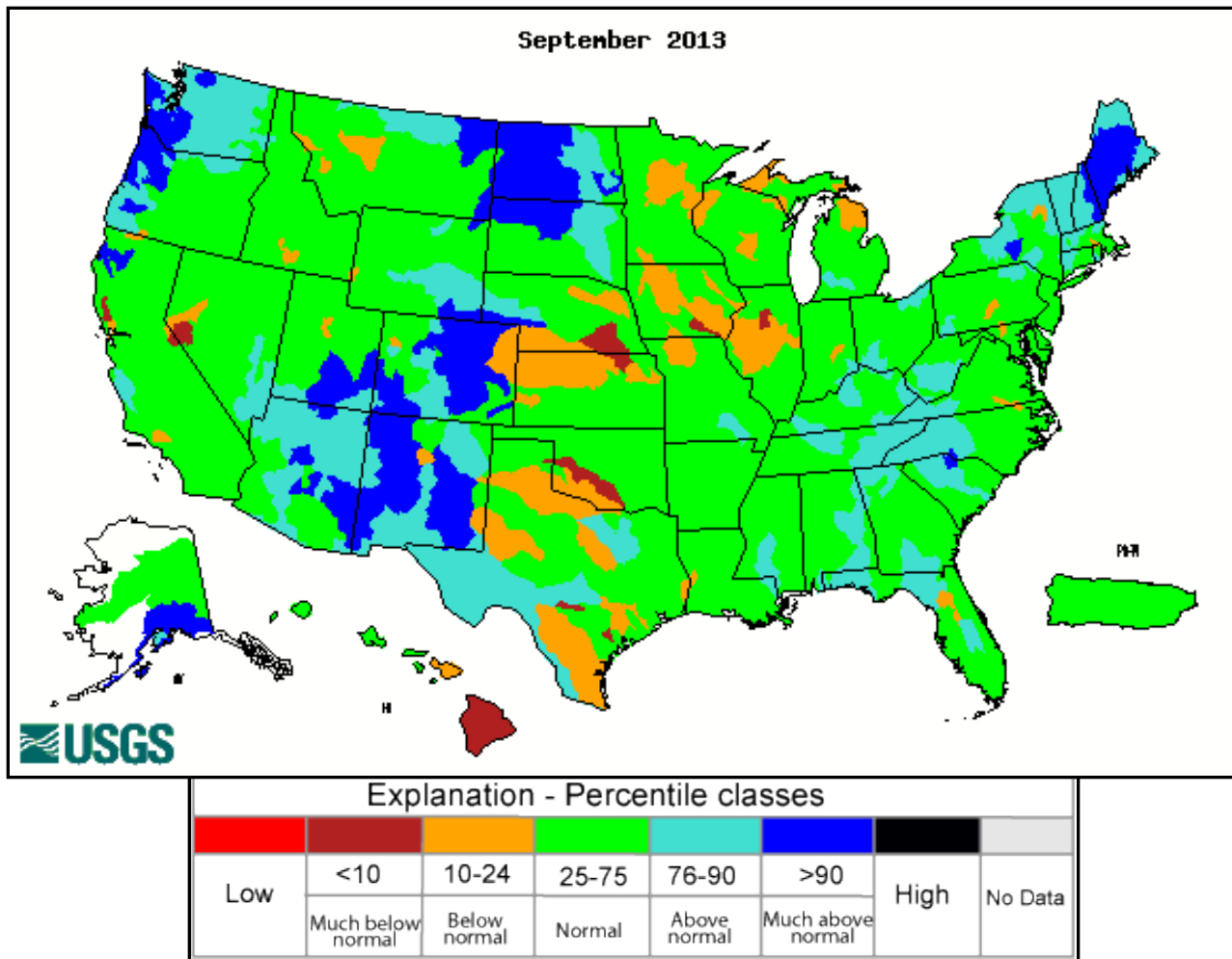


September 3, 2013

October 1, 2013

### Streamflow:

The United States Geological Survey's (USGS) September 2013 river streamflow records were compared with all historical September streamflow records. Streamflow was normal across the majority of Mississippi, Louisiana, and Arkansas. Streamflow was slightly above average in the Pearl River Basin.



### River Conditions:

No flooding occurred along the river systems in the HSA. Rivers experienced only a few minors during the month of September. The Mississippi River from Arkansas City to Natchez fell for the first two-thirds of the month before rising gently and slowly the remainder of the month.

### Climatic Outlook and Flood Potential:

The climatic outlook shows equal chances for above, below, and normal for both temperatures and precipitation the next 3 months. Based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

Pearl River System: Average.

Yazoo River System: Average.

Big Black River System: Average.

Homochitto River System: Average.

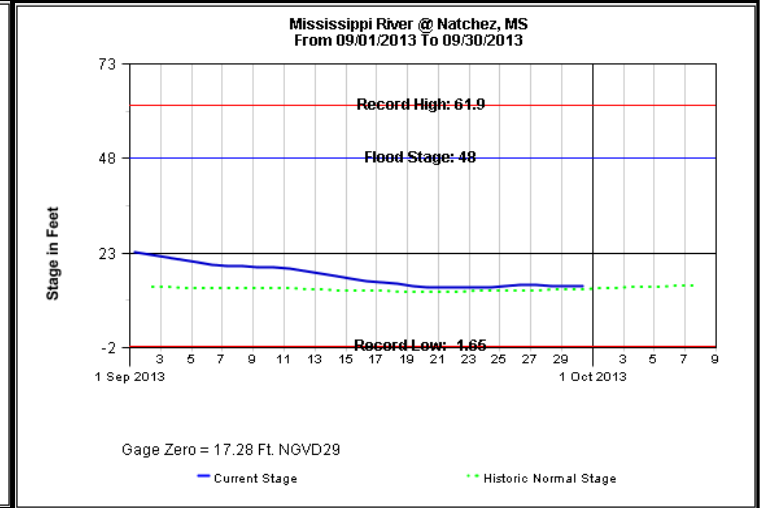
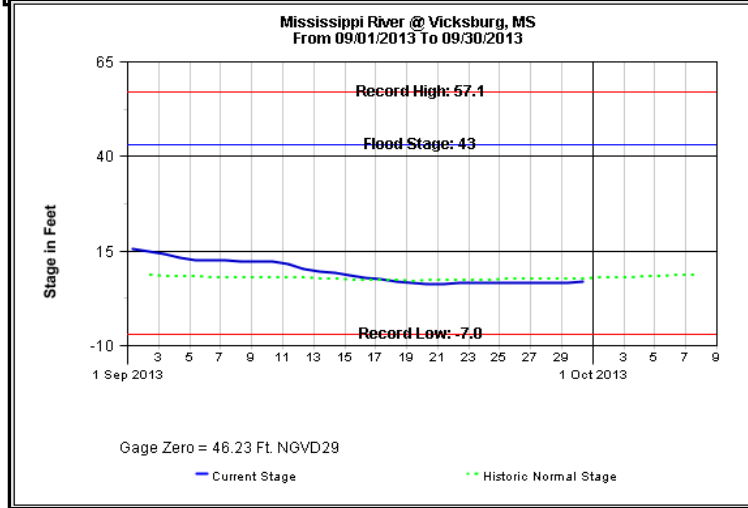
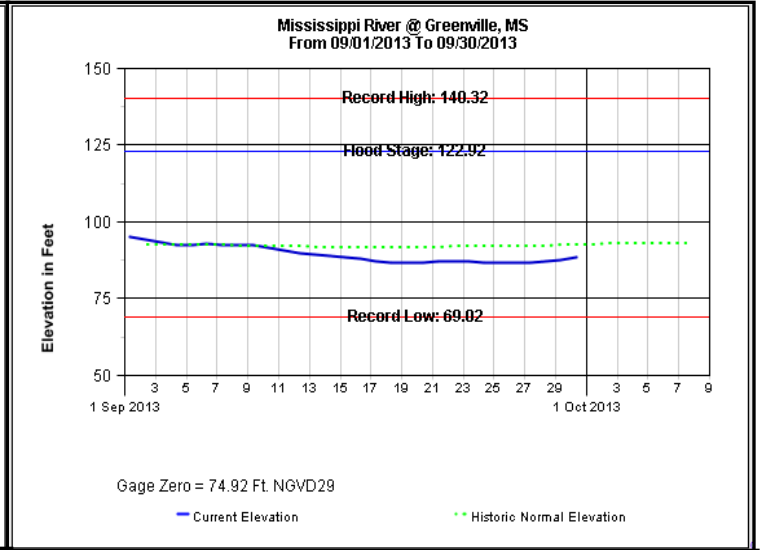
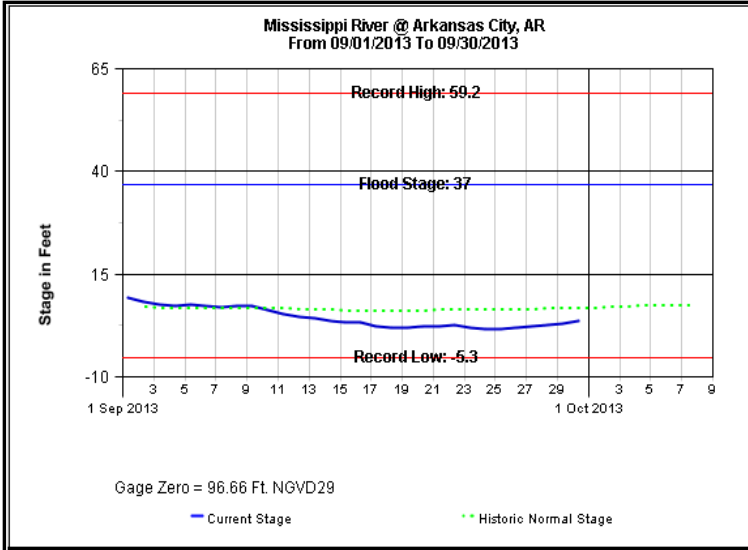
Pascagoula River System: Average.

Northeast LA and Southeast AR: Average.

Tombigbee River System: Average.

Mississippi River: Average.

**Mississippi River Plots September 2013**  
**Plots courtesy of the United States Army Corps of Engineers**



**Monthly Preliminary High and Low Stages:**

Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	9.44	9/1/13	1.64	9/25/13
Greenville	48	20.19	9/1/13	11.59	9/25/13
Vicksburg	43	15.51	9/1/13	6.29	9/20/13
Natchez	48	23.08	9/1/13	13.85	9/20/13

### Rainfall for the Month of September:

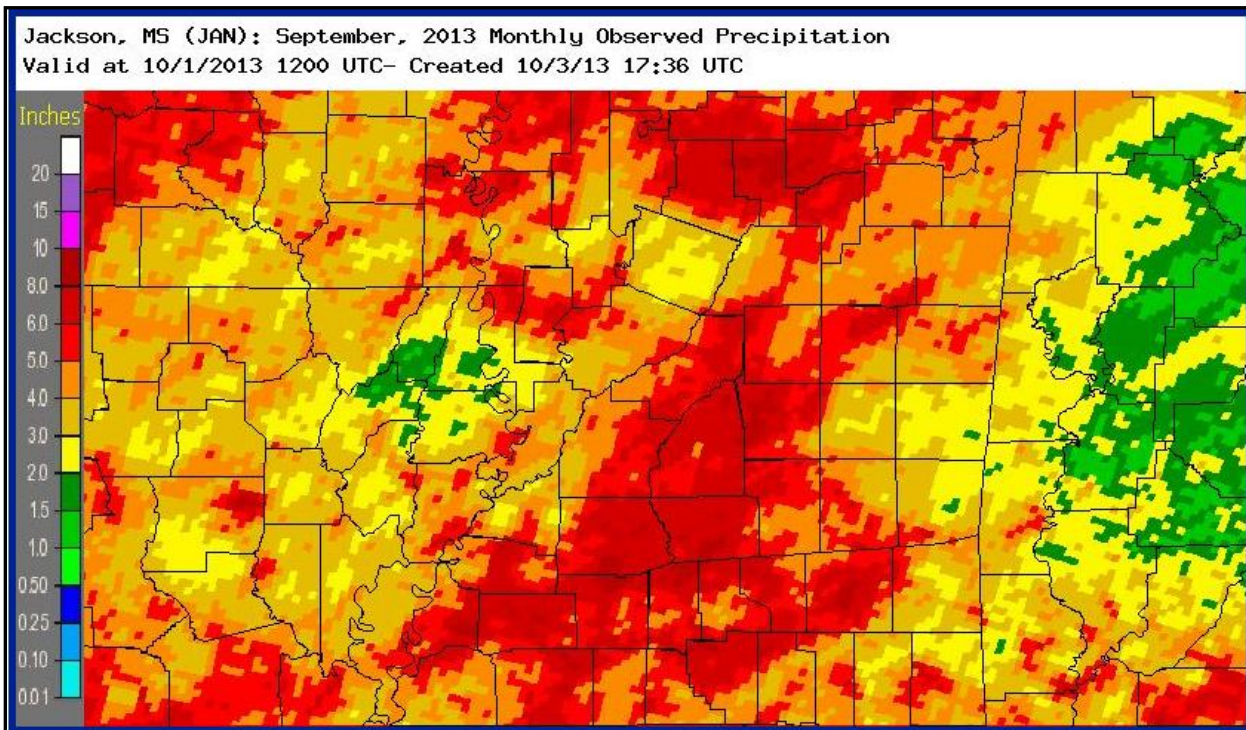
The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on August 31<sup>st</sup> until 7 am on September 30<sup>th</sup> were:

9.25 inches nr Goshen Springs, MS; 8.58 inches nr Winona, MS; 8.52 inches at Grenada, MS; 8.50 inches of rainfall at Collins, MS; 8.35 inches at Laurel, MS; 8.04 inches at Sumrall, MS; 7.84 inches at Cleveland, MS; 7.31 inches at Raleigh, MS; 7.29 inches at Rolling Fork, MS; 7.18 inches at Pat Harrison Waterway's Dry Creek Water Park, MS; and 7.16 inches at Elliot, MS.

Some lesser monthly amounts:

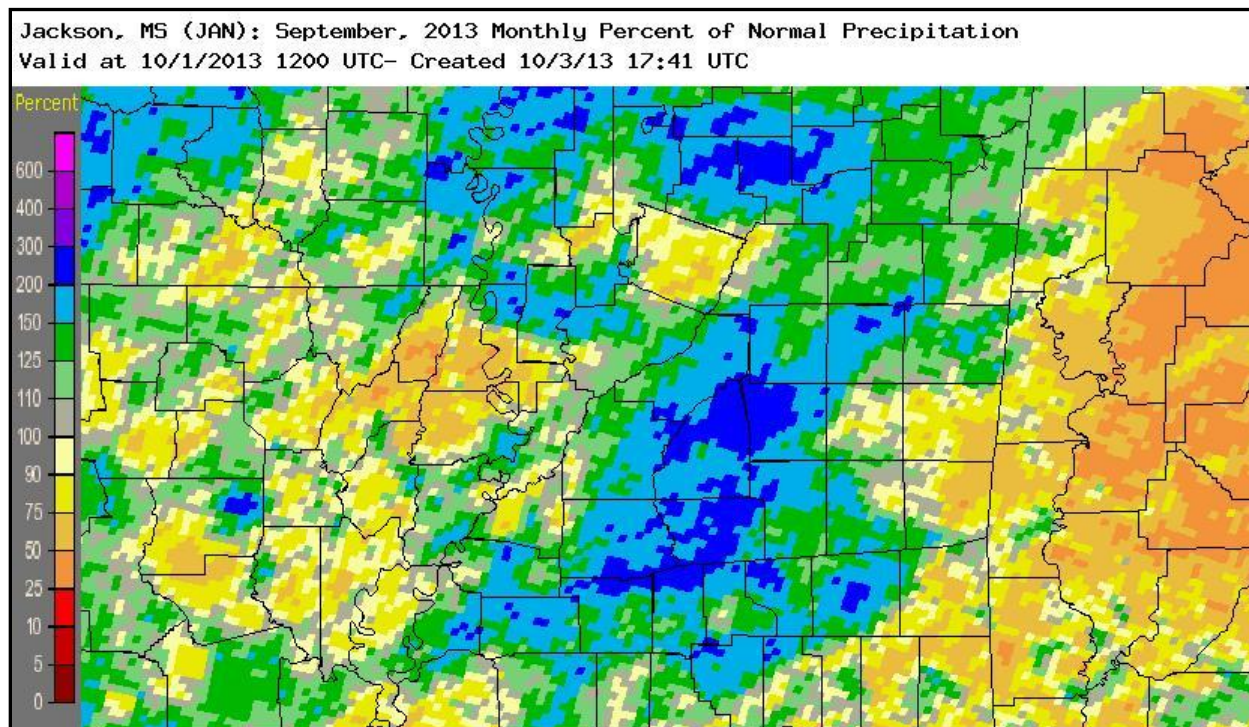
1.81 inches at Rayville, LA; 2.30 inches at Vidalia, LA; 2.43 inches at Collinsville, MS; 2.54 inches at Pat Harrison Waterway's Archusa Water Park; 2.62 inches at Topton, MS; 2.71 inches at Okatibbee Lake, MS; 2.84 inches at Pat Harrison Waterway's Turkey Creek Water Park, MS; and 2.93 inches at Pioneer, LA.

### September Rainfall Estimates:





## Percent of Normal Precipitation:



**Note:** Observer rainfall and MPE may differ due to time differences.

## September Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2013 Rainfall	2013 Departure from Normal
Jackson, MS	7.37	+4.34	51.03	+10.72
Meridian, MS	2.73	-0.70	52.25	+9.86
Greenwood, MS	8.09	+4.43	46.34	+8.61
Greenville, MS	7.73	+4.65	36.71	-0.93
Hattiesburg, MS	5.04	+0.96	57.21	+10.97
Vicksburg, MS	5.65	+2.76	53.80	+14.34

**Total Flood Warning products issued: 0**  
**Total Flood Statement products issued: 0**  
**Total Flood Advisories MS River : 0**  
**Daily Climate and Ag WX Products (AGO'S) issued: 30**  
**Daily CoCoRaHS Rainfall Products (LCO'S) issued: 30**  
**Daily River and Lake Summary Products (RVD'S) issued: 30**

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**Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.**

**cc:            USGS Little Rock District**  
**USGS Ruston District**  
**USACE Mobile District**  
**USACE Vicksburg District**  
**USACE Mississippi Valley Division**  
**USGS Mississippi District**  
**SRH Climate, Weather and Water Division**  
**Lower Mississippi River Forecast Center**  
**Pearl River Valley Water Supply District**  
**Hydrologic Information Center**  
**Southern Region Climate Center**  
**Pat Harrison Waterway District**  
**Pearl River Basin Development District**